

REMARKS

The Office Action dated October 2, 2007 has been received and its contents carefully noted. In view thereof, claims 1, 2, and 10 to further define Applicants' claimed invention. Accordingly, claims 1-20 are presently pending in the instant application.

On pages 2 to 5 of the Office Action, claims 1-20 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kawaishi (US 6,798,071) in view of Weiler et al. (US 5,644,167). This rejection is respectfully traversed on grounds that Kawaishi and Weiler et al., whether taken singly or combined, fail to teach or suggest the combination of features of Applicants' claimed invention.

Independent claims 1, 2, and 10, as amended, recite a semiconductor device including, in part, "a plurality of second bonding wires for electrically connecting the second electrodes and the external connection terminals." In direct contrast to Applicants' claimed invention, Kawaishi merely discloses stacked first and second ICs 1 and 2 electrically connected to a lead frame 3 via relay electrodes 31-34 of a protection film 38. In further contrast to Applicants' claimed invention, Weiler et al. teaches, in FIG. 2, use of a lead frame 34 directly electrically connected between ESD circuits 52 and bonding wires 54. In FIG. 3, Weiler et al. teaches ESD circuits 52 directly electrically interconnected between the lead frame 34 and bonding wires 64. Here, Weiler et al. explicitly discloses (col. 6, lines 33-41) that the package assembly 60 substantially reduces the length of bonding wires 64, whereby high manufacturing costs and reliability problems are substantially alleviated.

As admitted by the Office Action, Kawaishi fails to teach or suggest circuit elements, "but only circuit connection traces." Accordingly, the Office Action relies upon Weiler et al. to remedy the deficiencies of Kawashi, and concludes it would have been obvious to "replace the element of Kawaishi with an ESD circuit as taught by Weiler in order to take the advantage as mentioned." Applicants respectfully disagree.

Applicants respectfully assert that the structure resulting from modifying Kawaishi with the teachings of Weiler et al. would fail to render Applicants' claimed invention obvious. As an example, the Office Action points to Weiler et al. for allegedly teaching "an analogous device" using a circuit element, such as an ESD device. However, the ESD device 52 taught by Weiler et al. is explicitly required to be directly connected to the bonding portion 36 of the lead frame 34. Thus, combining the explicit teachings of Weiler et al. with

Kawaishi would inherently result in preventing any of the outermost bonding wires 5/7/67 of Kawaishi from electrically interconnecting the lead frame 3 with the pads 11A/11B.

Kawaishi explicitly requires use of the outermost bonding wires 5/7/67 to electrically interconnecting the lead frame 3 with the pads 11A/11B, such that removing the outermost bonding wires 5/7/67 would change the principle operation of Kawaishi, thereby rendering Kawaishi unsatisfactory for its intended purpose. Thus, since combining Weiler et al. with Kawaishi would render Kawaishi unsatisfactory for its intended purpose, Applicants respectfully assert that there is no suggestion or motivation to make the proposed modification. See MPEP 2143.01(V). Therefore, Applicants respectfully assert that the Office Action fails to establish a *prima facie* case of obviousness with regard to at least amended independent claims 1, 2, and 10 since Kawaishi and Weiler et al., whether taken singly or combined, fail to teach or suggest the combination of features recited by amended independent claims 1, 2, and 10.

Applicants further assert that even if Weiler et al. could be properly combined with Kawaishi, one of ordinary skill in the art would immediately recognize that the combined teachings of Weiler et al. and Kawaishi would inherently fail to provide for “a plurality of second bonding wires for electrically connecting the second electrodes and the external connection terminals,” as required by amended independent claims 1, 2, and 10, and hence dependent claims 3-9 and 11-20. Therefore, Applicants respectfully assert that the Office Action further fails to establish a *prima facie* case of obviousness with regard to at least amended independent claims 1, 2, and 10 since Kawaishi and Weiler et al.

For at least the reasons set forth above, Applicants respectfully assert that none of the applied prior art, whether taken singly or combined, teaches or suggests the combination of features recited by independent claims 1, 2, and 10. Thus, Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) be withdrawn, and that a Notice of Allowance be issued for pending claims 1-30 of the present application without further delay.

Should the Examiner believe a conference would be of benefit in expediting the prosecution of the instant application, he is hereby invited to telephone counsel to arrange such a conference.

Respectfully submitted,
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